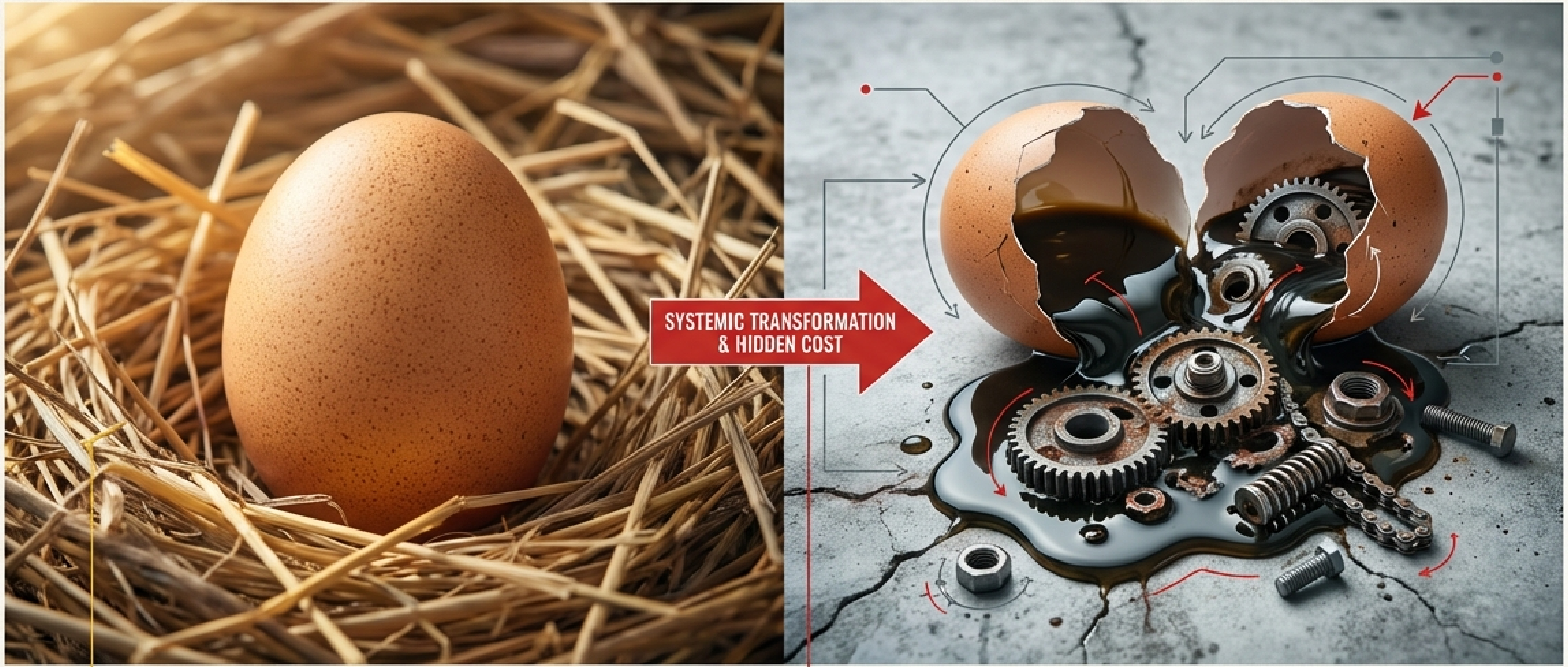
THE SILENT CHANGE IN OUR FOOD SYSTEM

UNCOVERING THE TRUTH ABOUT SEED OILS, SOY, AND THE HIDDEN COSTS OF MODERN FARMING


SYSTEMIC TRANSFORMATION
& HIDDEN COST

Traditional Farming: *Natural Feed & Environment*

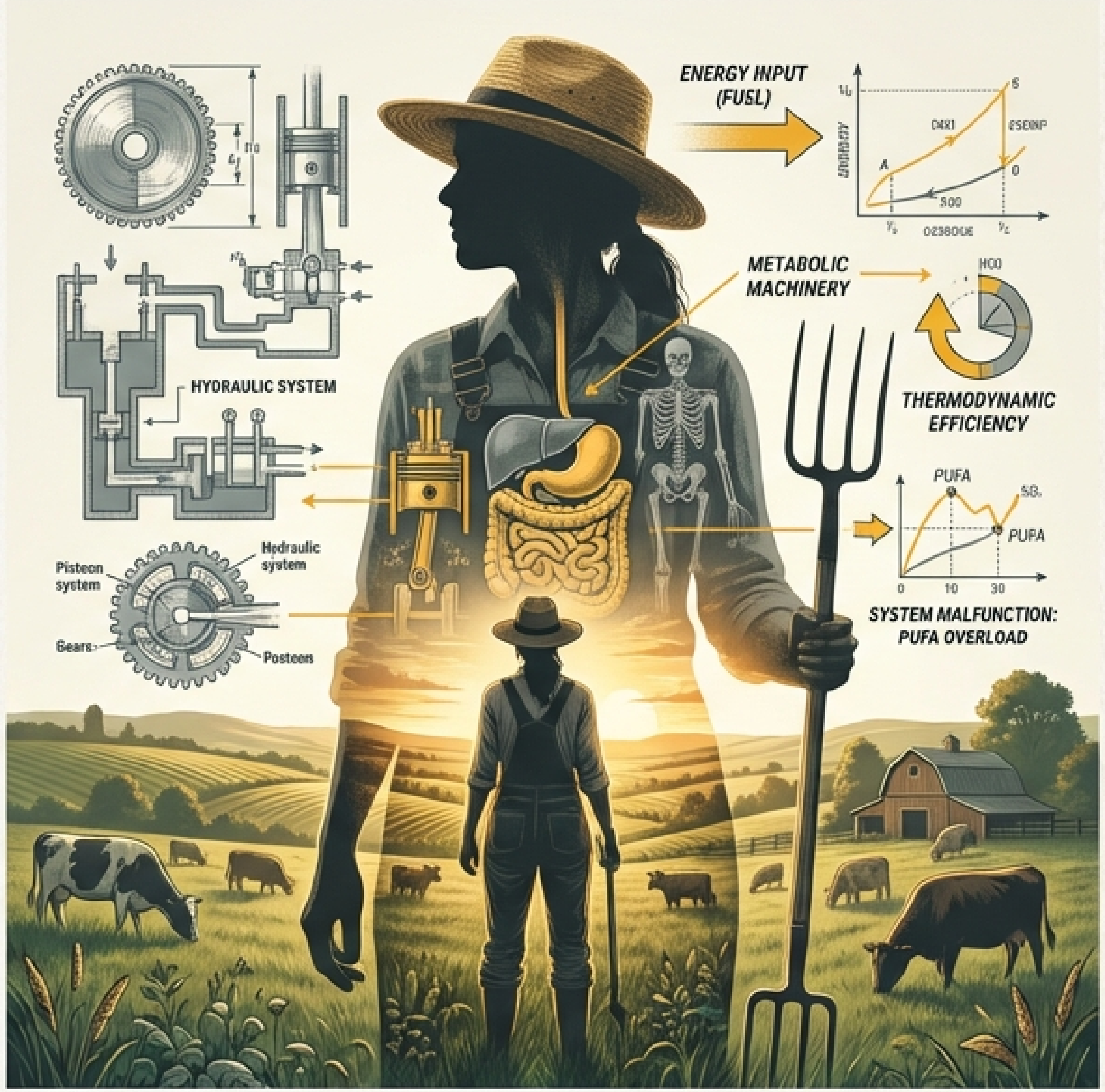
Modern Systems: *Processed Inputs, Industrial Machinery & Metabolic Risk*

Based on the insights of Dr. Ashley Armstrong (PhD, Mechanical Engineering) & The Mind & Matter Podcast

THE ENGINEER WHO TREATED HER BODY LIKE A BROKEN MACHINE

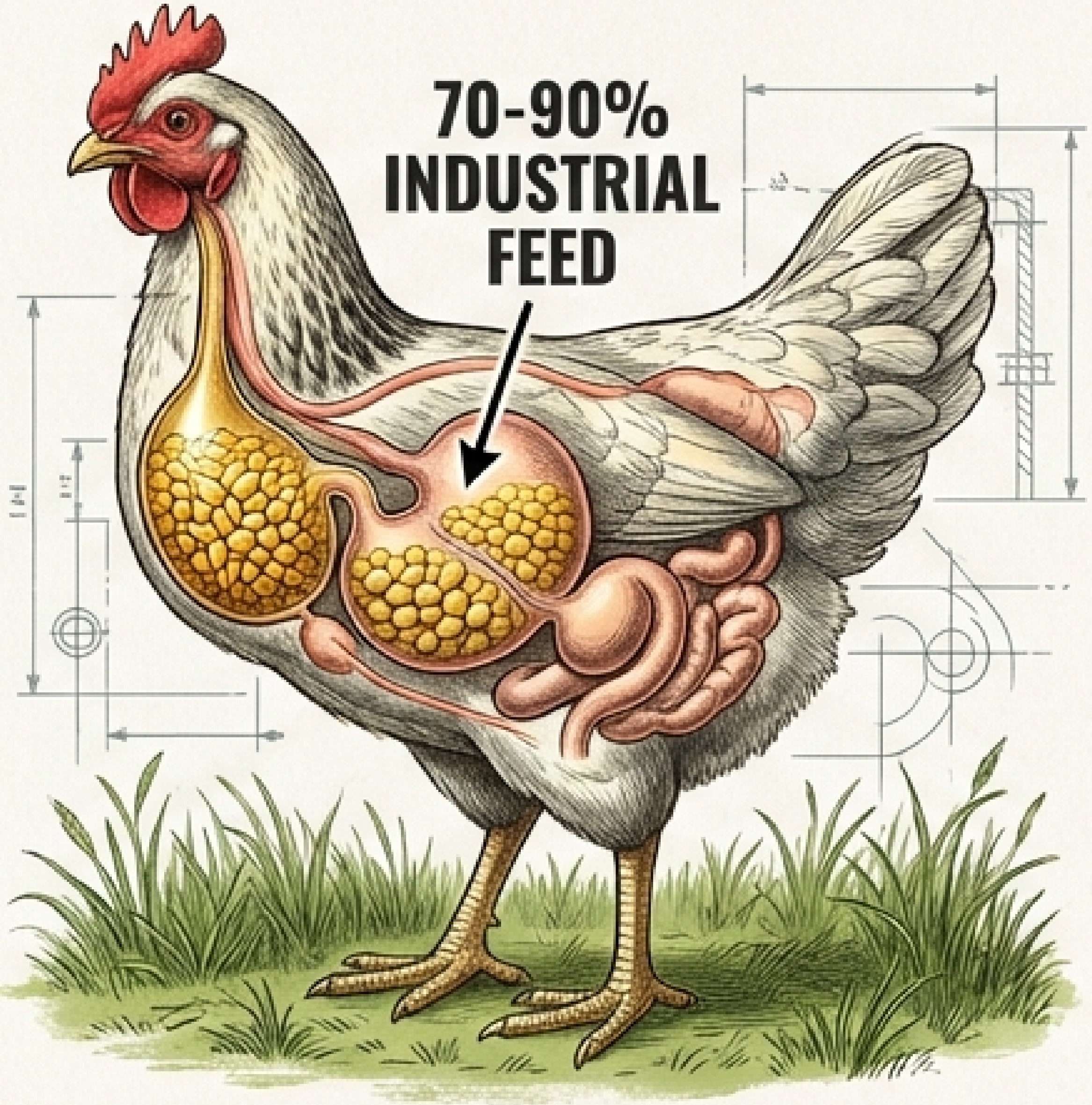
Subject: Ashley Armstrong, PhD

- **Background:** Mechanical Engineering & Academia.
- **The Malfunction:** Despite a “Harvard Health” diet (lean meats, nuts, seeds), suffered chronic fatigue, digestive issues, and Raynaud's in her 20s.
- **The Hypothesis:** The human body is a biological machine. If the output is broken, the fuel input is wrong.
- **The Pivot:** Abandoned a career in academia to become a regenerative farmer after discovering the metabolic impact of Polyunsaturated Fats (PUFAs).


ENERGY INPUT (FUSL)
METABOLIC MACHINERY
HYDRAULIC SYSTEM
THERMODYNAMIC EFFICIENCY
PUFA
PUFA
0
10
30
SYSTEM MALFUNCTION: PUFA OVERLOAD
Pisteon system
Hedraulic system
Gears
Posteon
500

> *“I realized how we farm impacts our food which impacts our health.”*

THE “PASTURE-RAISED” ILLUSION



THE MYTH

Consumer perception: Chickens forage freely, eating only grass and bugs.

THE REALITY

Even **“Pasture-Raised”** birds rely on **Corn & Soy** for the vast majority of their calories.

OUTDATED DATA

Nutrition Facts

7 servings per container

Serving sice

y Value*

2%

urated Fat 7g 0%

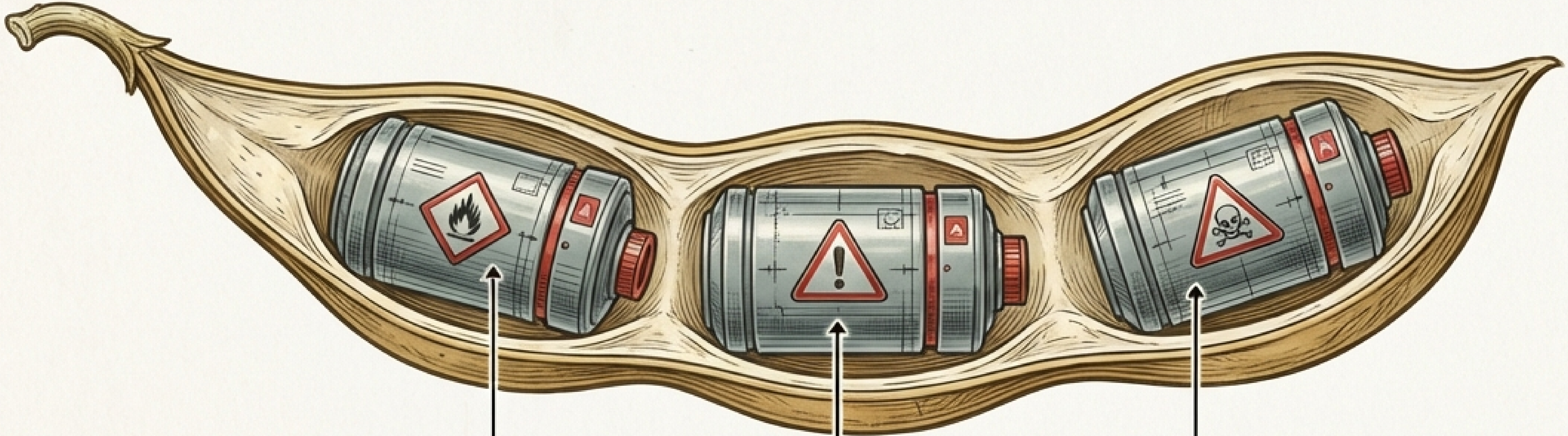
Trane Fat 0g

Cholesterol 0mg 0%

The Label Loophole: Nutrition labels are often copy-pasted from generic USDA databases created decades ago. They *do not* reflect the specific feed or fatty acid profile of the actual egg in the carton.

Investigative Editorial

SOY: THE TROJAN HORSE FOR THE “THREE P’s”



PUFAs (Polyunsaturated Fats)

Highly unstable fats that oxidize easily. *The primary fat profile of soy.*

PHYTOESTROGENS

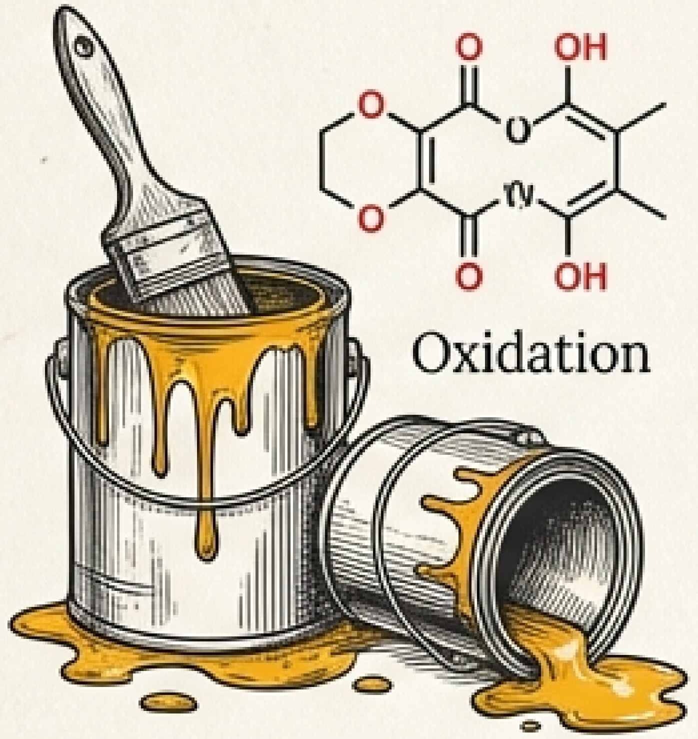
Plant compounds that mimic estrogen, disrupting endocrine signaling and digestion.

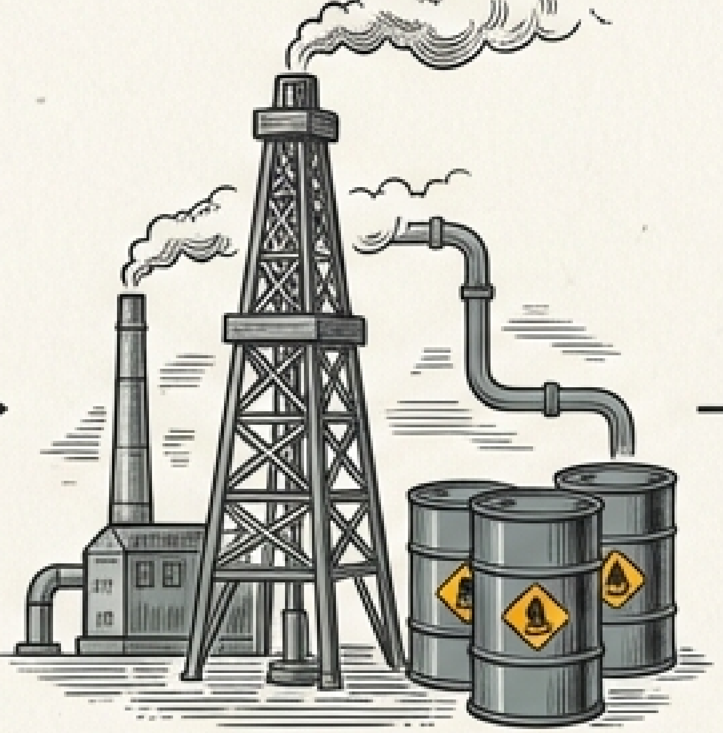
PESTICIDES

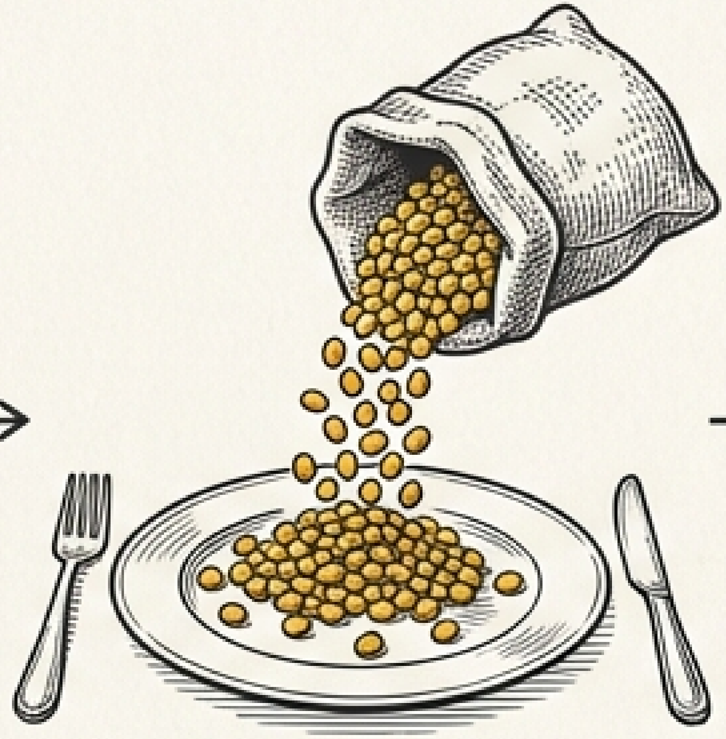
Specifically Glyphosate (Roundup). Used heavily as a desiccant, even on some non-GMO crops.

The Low **“P”** Standard: Modern soy acts as a delivery vehicle for metabolic disruptors.

FROM PAINT BUCKETS TO DINNER PLATES







PESTICIDE
CHEMICALS

PRE-1900s

Soy & Linseed oils used for paint because PUFAs oxidize (harden) rapidly in air.

THE PETROLEUM SHIFT

Paint industry switches to petroleum bases. Soy loses its primary market.

THE REBRAND

Surplus soy is rebranded as a food source.

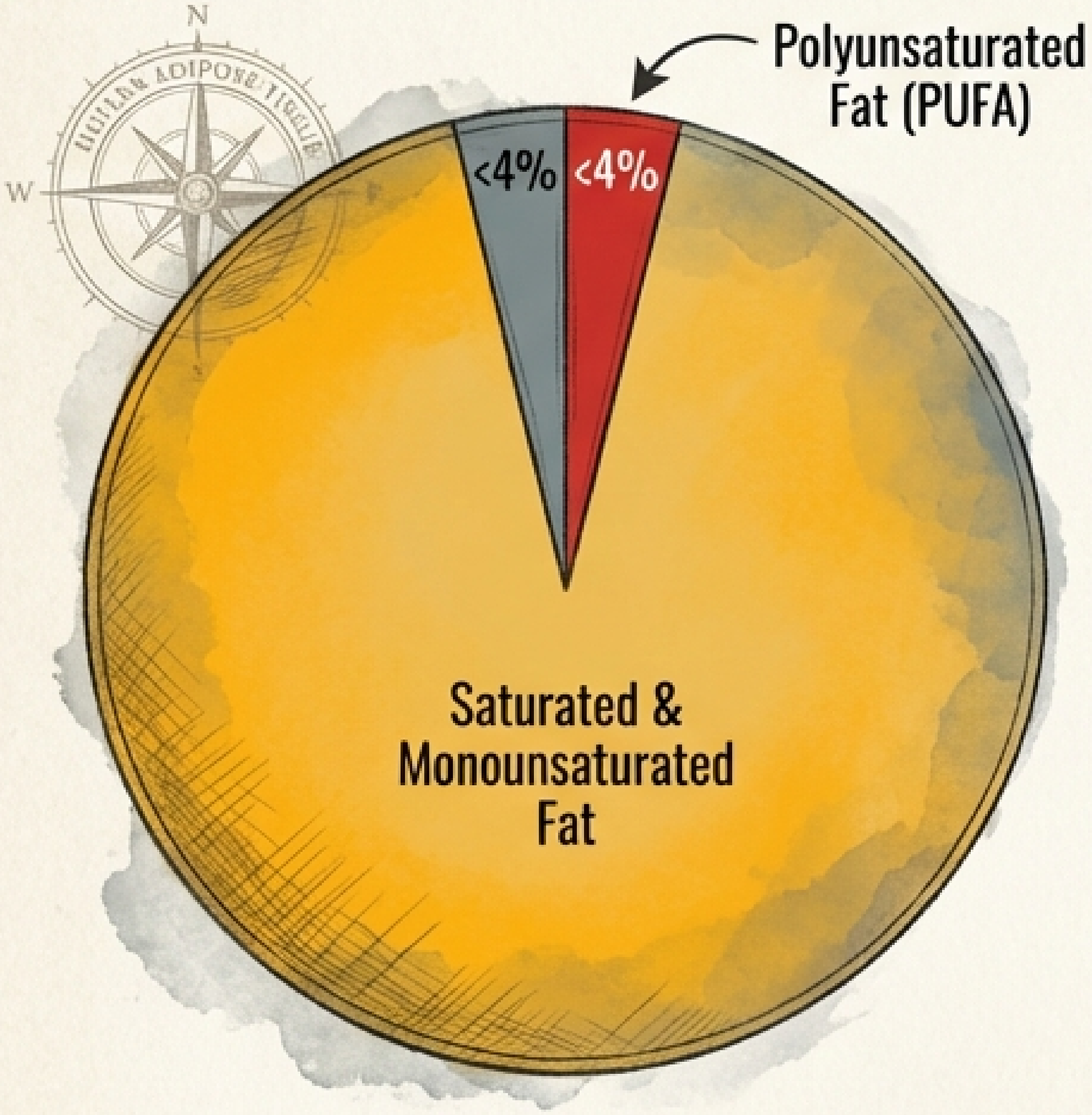
POST-WWII

Chemical warfare plants repurposed to manufacture agricultural pesticides.

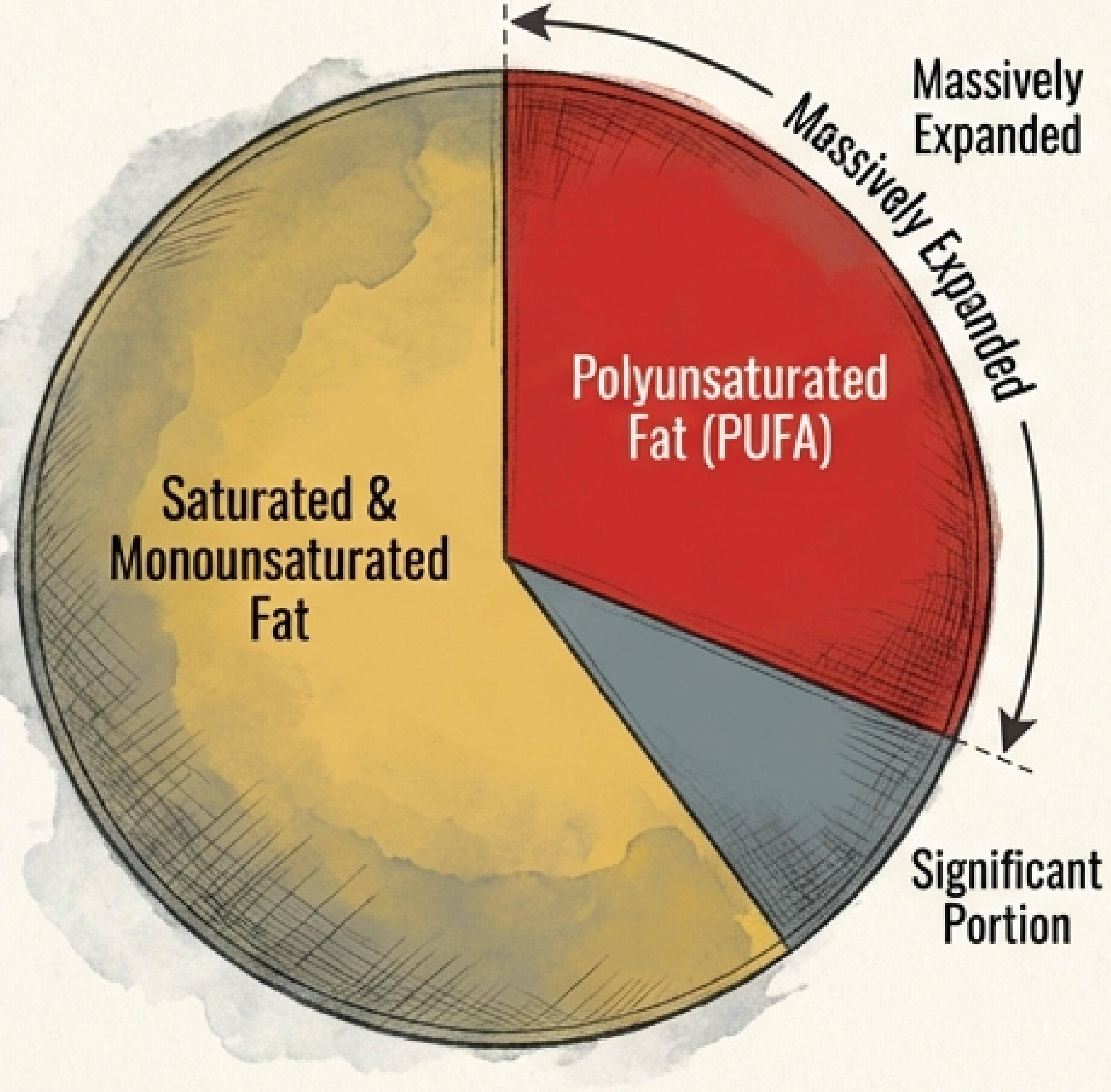
Our modern food system is built on repurposed industrial waste, not nutritional intent.

WE ARE WHAT OUR FOOD EATS

Human Fat Composition (1900)

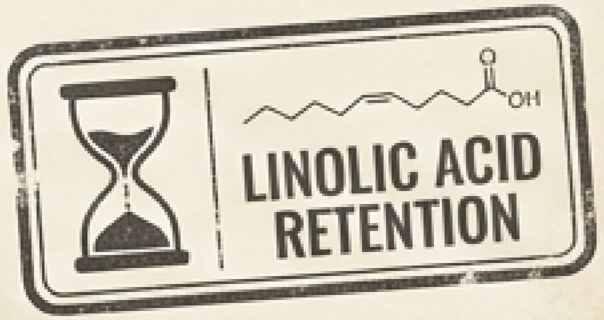


Human Fat Composition (Today)



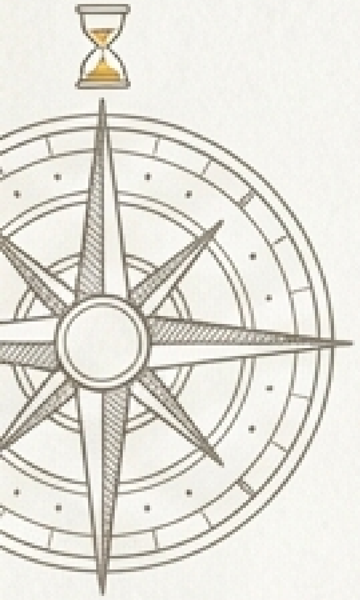
Investigative Editorial | Source: Human Adipose Tissue Analysis (1900 vs. Present).

- **The Shift:** The demonization of animal fats (butter/tallow) drove the consumption of seed oils (Crisco/Margarine).
- **The Half-Life:** Linoleic Acid remains in human tissue for ~600 days. It takes years to “re-saturate” body stores.



NotebookLM

THE METABOLIC BRAKE: WHY WE ARE HIBERNATING



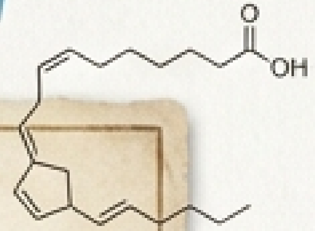
High PUFA Diet (Nuts/Seeds)
= Signal for Winter

*High **Linoleic Acid** Intake*

*Body **Lowers** Temperature*

*Energy Conserved as **Fat***

Hibernation State

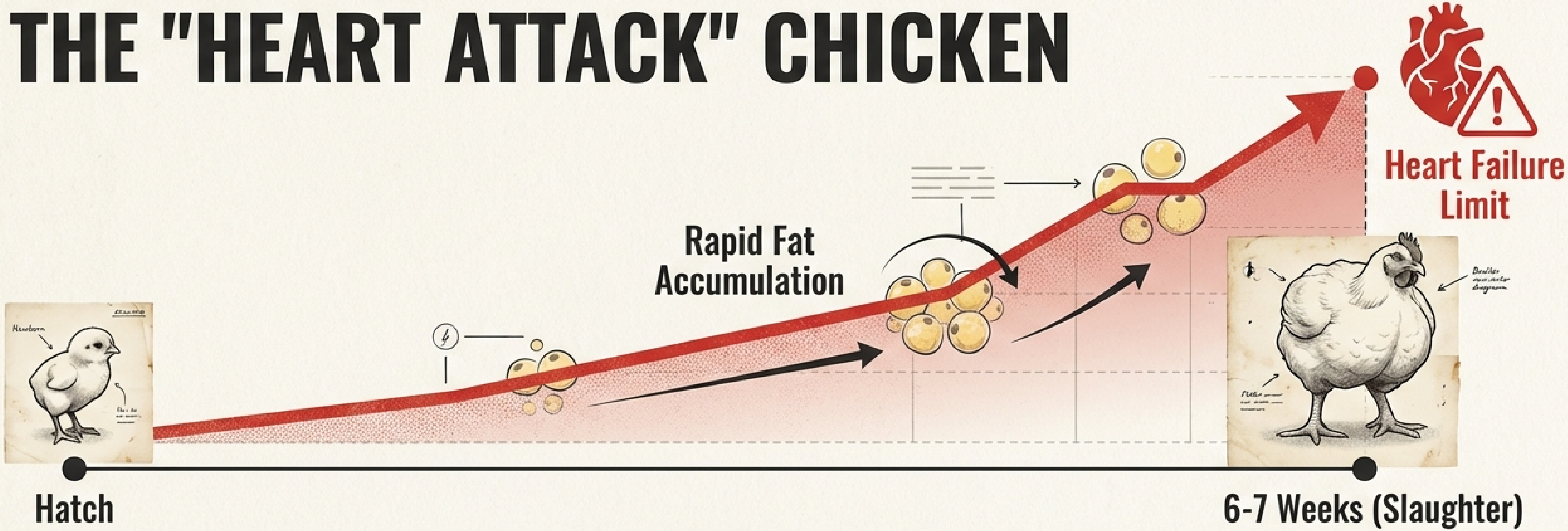


Evidence: *Modern humans have lower average body temperatures and basal metabolic rates than humans 100 years ago (Data: Dr. John Speakman)*

Metabolic Rate
Downregulated

Investigative Editorial

THE "HEART ATTACK" CHICKEN

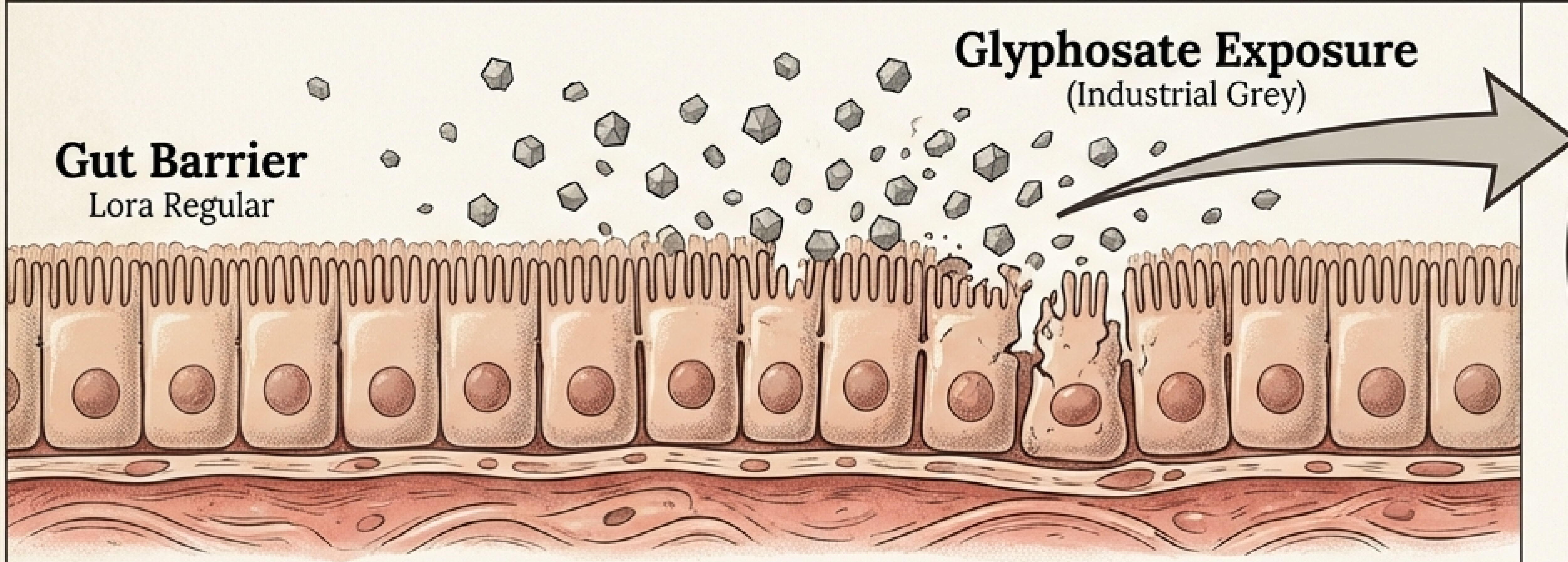

Heart Failure Limit
Rapid Fat Accumulation
Newborn
Hatch
6-7 Weeks (Slaughter)

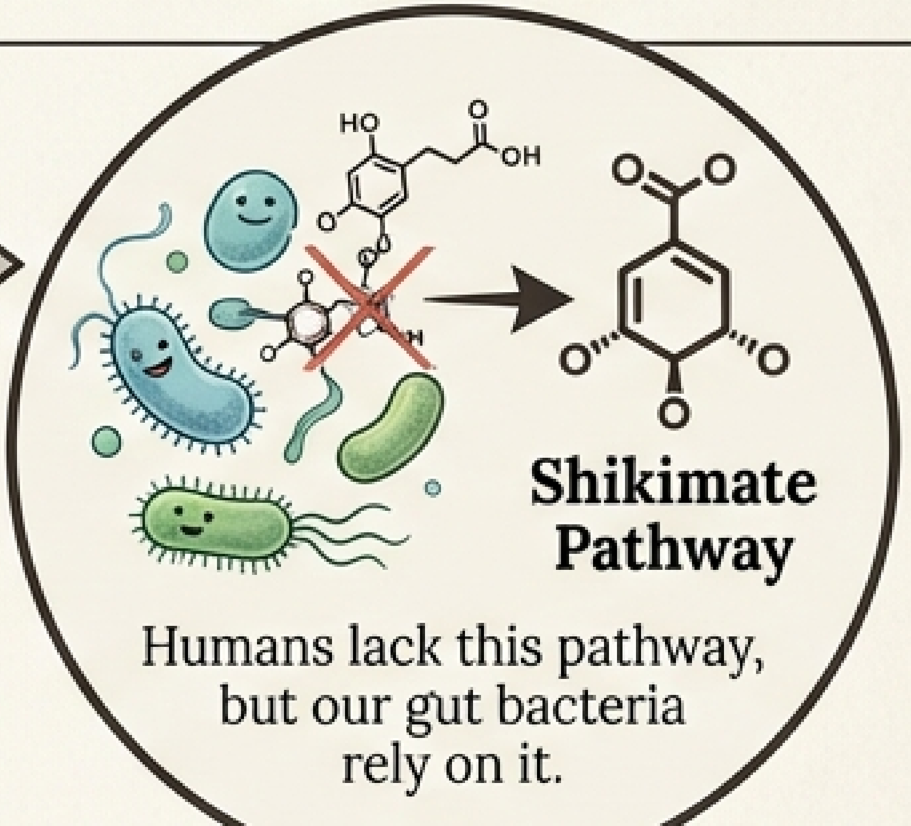
Fact: Modern chickens on high-PUFA corn/soy diets fatten so aggressively they must be processed by 6-7 weeks.

Consequence: If allowed to live longer, they frequently die of heart attacks because their organs cannot support the unnatural obesity.

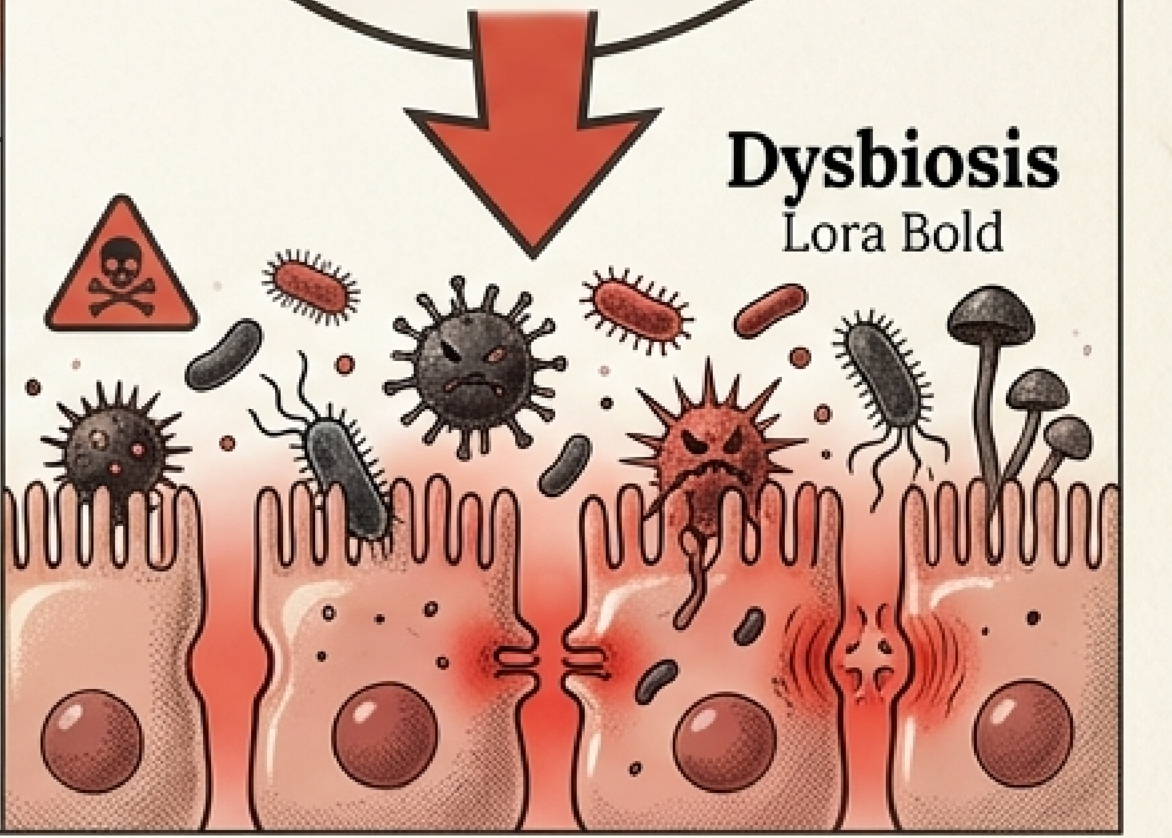
The Question: If this diet causes rapid obesity and heart failure in animals in weeks, **what is it doing to humans over decades?**

GLYPHOSATE & THE GUT BARRIER


Gut Barrier
Lora Regular
Glyphosate Exposure
(Industrial Grey)


HO
OH
Shikimate Pathway

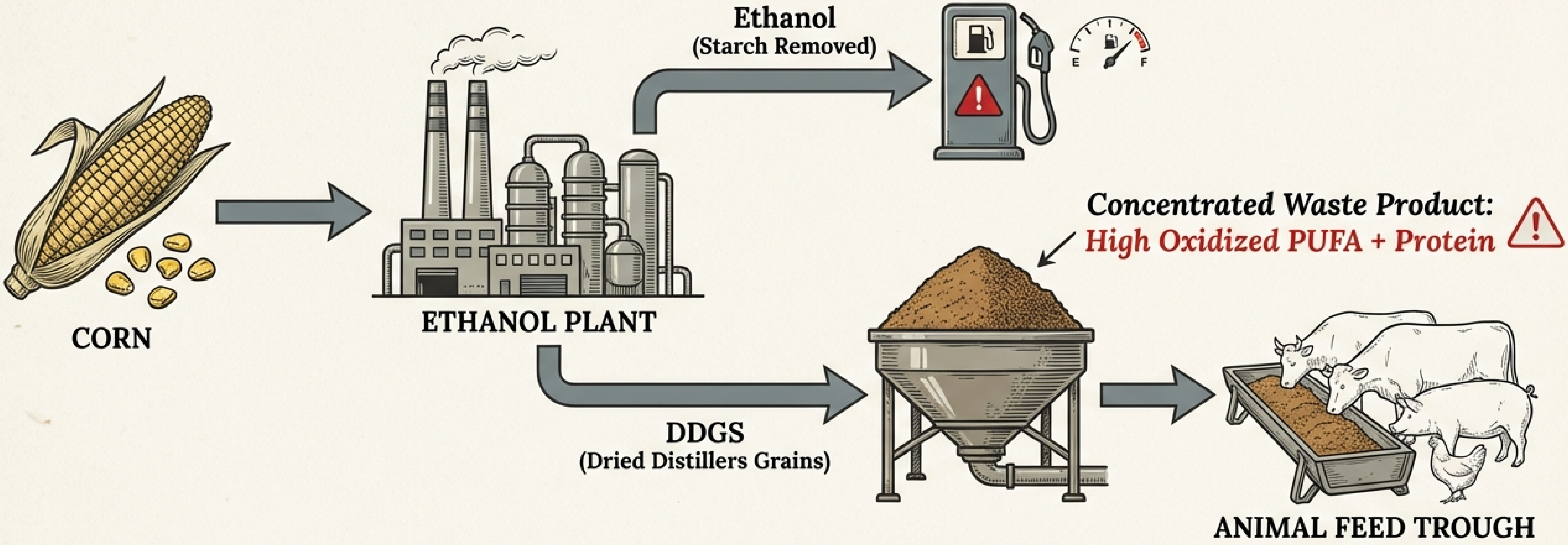
Humans lack this pathway, but our gut bacteria rely on it.


Dysbiosis
Lora Bold

THE NUTRIENT TRAP

- **Problem:** The body requires Choline to detoxify glyphosate metabolites.
- **Deficiency:** Modern diets are low in animal-based Choline.
- **Result:** Neuroinflammation and mitochondrial damage.

DDGS: THE ETHANOL WASTE ON YOUR PLATE



CORN

ETHANOL PLANT

Ethanol
(Starch Removed)

DDGS
(Dried Distillers Grains)

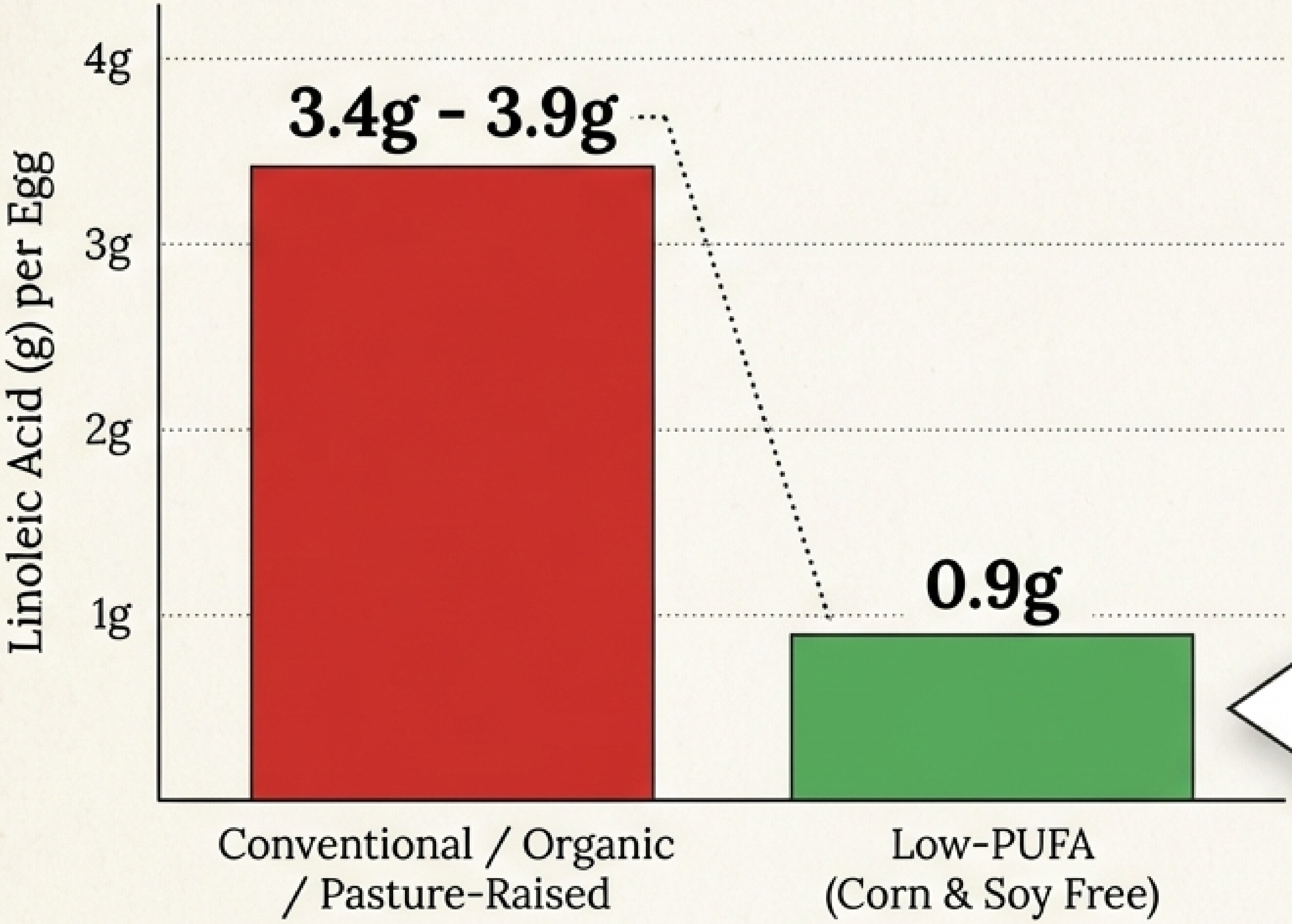
Concentrated Waste Product:
High Oxidized PUFA + Protein

ANIMAL FEED TROUGH

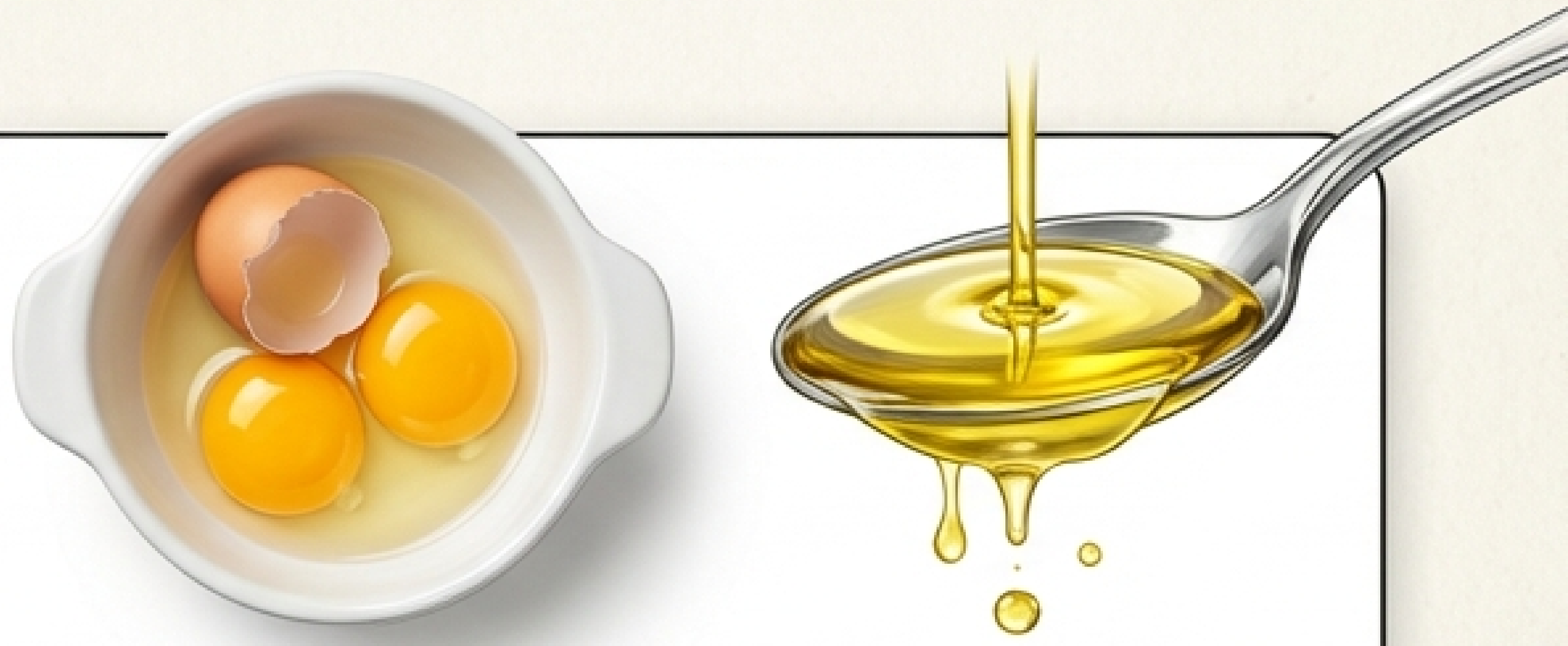
*When starch is removed for fuel, the remaining "food" is a concentrated source of **unstable fat**. This byproduct is fed to livestock, creating **soft, unstable fat** in the animal—and **eventually in the consumer.***

Investigative Editorial

THE DATA: CONVENTIONAL VS. LOW-PUFA EGGS



Source: Mass Spectrometry Data, Michigan State University

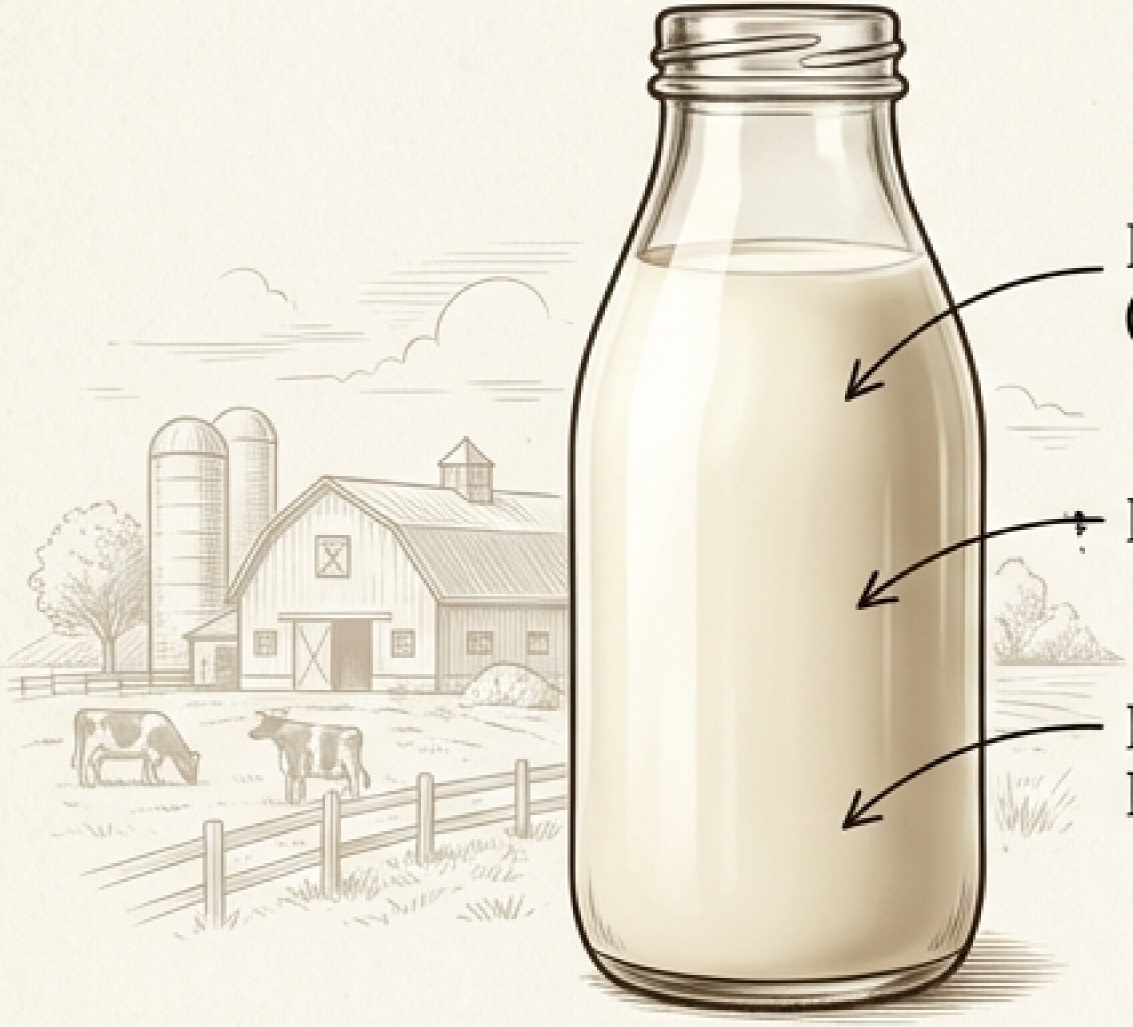


THE HIDDEN COST: EATING JUST TWO “STANDARD” HEALTHY EGGS PROVIDES THE SAME PUFA LOAD AS A TABLESPOON OF CANOLA OIL.

Polyunsaturated fatty acids (PUFA) accumulate in the body, potentially contributing to inflammation and metabolic issues.

DAIRY: THE GOOD, THE BAD, AND THE “UNSATURATED”

RAW / UNPROCESSED

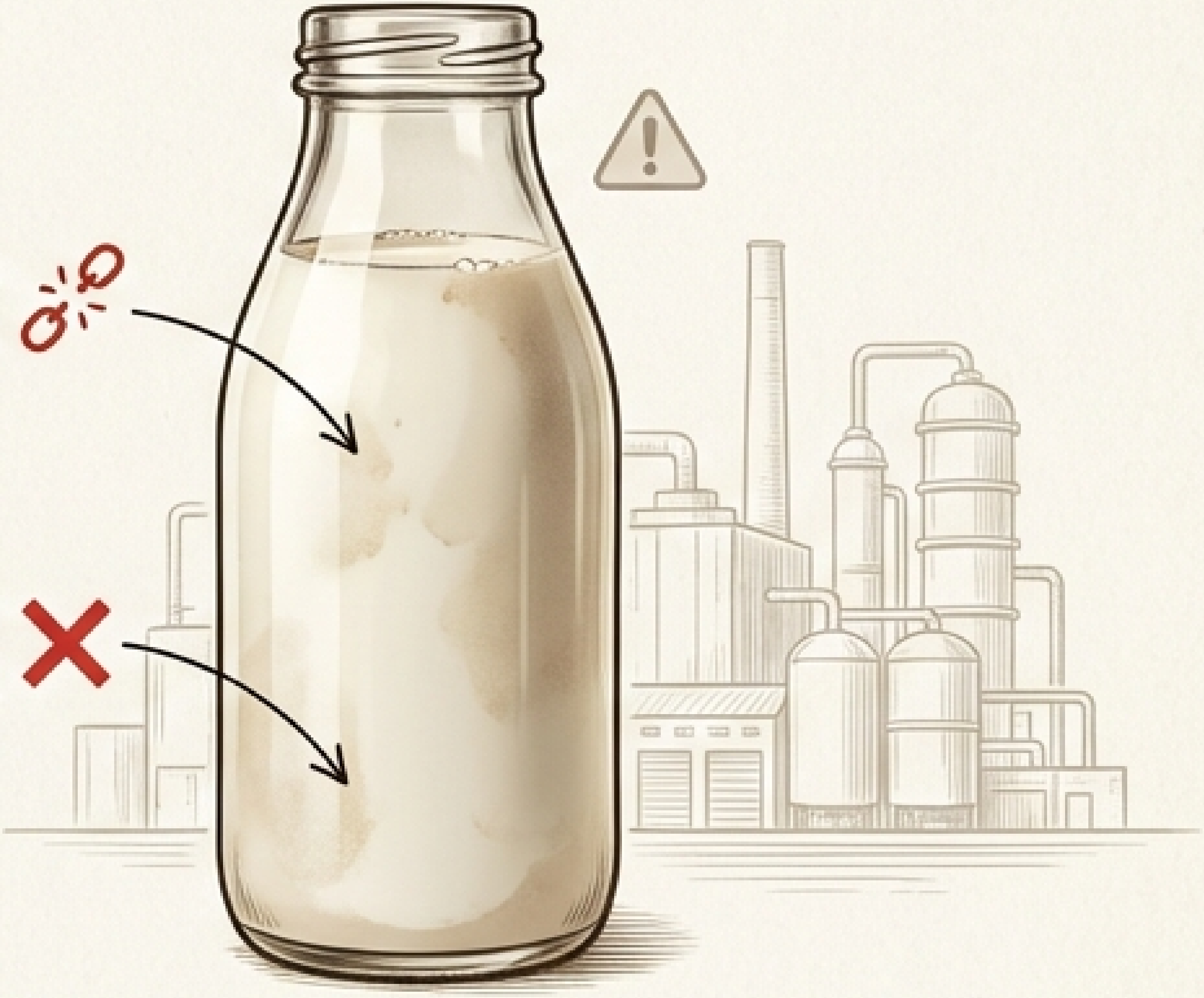


Intact Lactoferrin (Antimicrobial)

Live Probiotics

Digestible Enzymes

PASTEURIZED / INDUSTRIAL



Denatured Proteins

Enzymes Destroyed

⚠ Warning

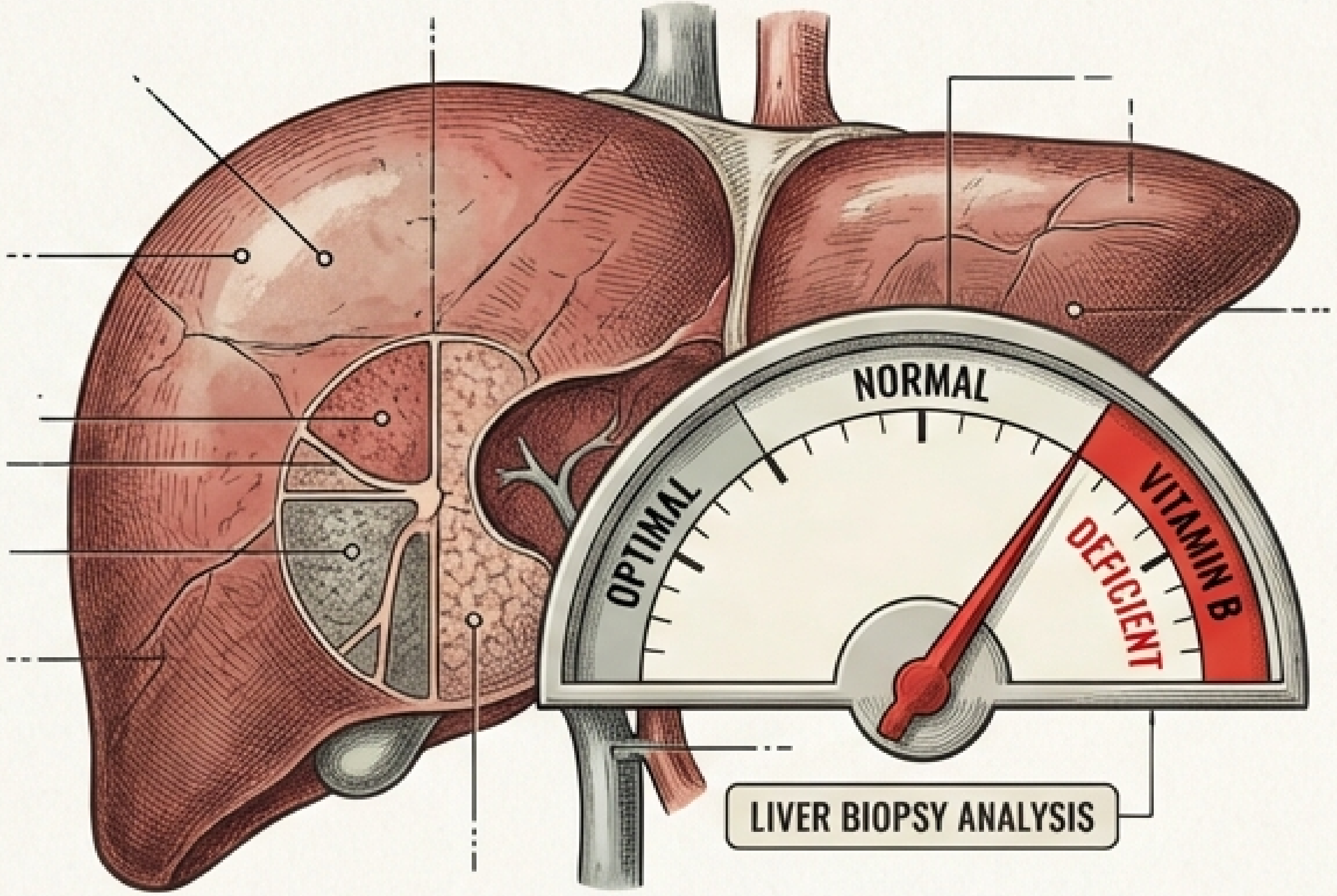
The New Industrial Threat: Rumen Bypass

Researchers are currently funding methods to feed cows encapsulated oil seeds, forcing vegetable oils past their stomachs to artificially create **“Heart Healthy” (High PUFA)** milk.

THE MALNUTRITION OF THE OBESE

Case Study: Soybean Oil vs. Tallow

Animals fed soybean oil gained the same weight as those fed tallow, but developed severe **Vitamin B liver deficiencies despite unlimited food access.**


NORMAL
OPTIMAL
VITAMIN B
DEFICIENT
LIVER BIOPSY ANALYSIS

YOU CAN BE OBESE AND MALNOURISHED SIMULTANEOUSLY.

THE ECONOMICS OF REAL FOOD

The true cost of cheap food is paid in healthcare bills. Paying for nutrient density (e.g., $14.99/dozen eggs) reduces the need for volume and supplements.

HOW TO OPT OUT OF THE SYSTEM

CONSUMER ACTION CHECKLIST

✓ INTERROGATE THE FEED

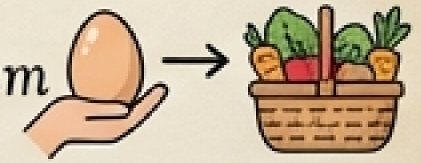
Ask: "Is the feed **Corn-Free** *and* **Soy-Free***?" "***Pasture-Raised***" is not enough.*

✓ IGNORE THE FRONT LABEL

ORGANIC
CAGE-FREE

'Organic' and 'Cage-Free' often still mean **high-PUFA industrial grains***.*

✓ START SMALL



Don't aim for perfection. Change one staple item first. Eggs are the highest impact entry point.

✓ KNOW YOUR FARMER

Verify their practices directly.

THE GOAL: RE-SATURATE

We have spent 100 years **‘un-saturating’** our biology. The path to health is returning to **ancestral fats**.

Start Today. It takes years to turnover body fat stores.

RESOURCES:

- Angel Acres / Nourish Food Club (Corn & Soy-Free Cooperative)
- Mind & Matter Podcast (Metabolic Science Deep Dives)

“We are trying to build a little alternative food system… to re-saturate intentionally.”